

WHAT IS CLAIMED IS:

- 1 1. A data quality auditing tool, comprising:
2 a rule-based programming data analyzer that compares received data to be audited against
3 a set of rule-based criteria and identifies as unacceptable data that data which violate the rule-
4 based criteria.
- 1 2. The tool as in claim 1, wherein the rule-based criteria are business rules and data
2 conventions.
- 1 3. The tool as in claim 1, wherein the rule-based criteria are data rules represented as
2 constraints on data which must be met.
- 1 4. The tool as in claim 3, wherein the constraints represent business rules and data
2 conventions.
- 1 5. The tool as in claim 3, wherein the constraints comprise expert system production
2 rules.
- 1 6. The tool as in claim 3, wherein the constraints are static and are applied through
2 the comparison against the data as is.
- 1 7. The tool as in claim 6, wherein the constraints are dynamic and are applied
2 through the comparison against data flows.

1 8. The tool as in claim 1, wherein the analyzer comprises a match functionality that
2 compares received data records representing the data to be audited against the set of rule-based
3 criteria to generate a conflict set of one or more candidate rules which are met.

1 9. The tool as in claim 8, wherein the analyzer further comprises a conflict
2 resolution functionality that assigns priority among and between the one or more candidate rules
3 which are met and selects one or more rules for execution.

1 10. The tool as in claim 9, wherein the analyzer further comprises an action
2 functionality that implements actions to be taken on the data as specified by the one or more
3 rules selected for execution.

1 11. A method for data auditing, comprising:

2 comparing received data to be audited against a set of rule-based criteria; and

3 identifying as unacceptable data that data which violate the rule-based criteria.

1 12. The method as in claim 11, wherein the rule-based criteria are business rules and

2 data conventions.

1 13. The method as in claim 11, wherein the rule-based criteria are data rules

2 represented as constraints on data which must be met.

1 14. The method as in claim 13, wherein the constraints represent business rules and

2 data conventions.

1 15. The method as in claim 13, wherein the constraints comprise expert system

2 production rules.

1 16. The method as in claim 13, wherein the constraints are static and are applied

2 through the comparison against the data as is.

1 17. The method as in claim 16, wherein the constraints are dynamic and are applied

2 through the comparison against data flows.

1 18. The method as in claim 11, wherein comparing comprises matching received data
2 records representing the data to be audited against the set of rule-based criteria to generate a
3 conflict set of one or more candidate rules which are met.

1 19. The method as in claim 18, further comprises resolving conflicts by assigning
2 priority among and between the one or more candidate rules which are met and selecting one or
3 more rules for execution.

1 '20. The method as in claim 19, further comprising implementing actions to be taken
2 on the data as specified by the one or more rules selected for execution.